

## **§ 103(a) Rejections**

### **Fujimoto**

Fujimoto is directed to a system and method for controlling a display of graphic data pixels on a video monitor having a different display aspect ration that the pixel aspect ratio. More specifically, Fujimoto discloses an image display control apparatus for displaying blended images on a television monitor by combining graphics data and motion picture video data that is read from DVD media. (col. 5, lns. 3-7). Applicants submit that Fujimoto discloses that RAM 103 is the only memory disclosed in Fujimoto that is used to store graphics data and lacks any reference to any memory that would store video data. Further, Fujimoto's figure element 100b is read-only external storage rather than read/write memory. (col. 5, lns. 5-6).

### **Schumann et al.**

Schumann et al. is directed to a compressed video graphics system and methodology. The system enables graphic elements to be built by an application that builds them for display at a user station that decodes compressed images and video streams. (col. 2, lns. 47-49). Schumann et al. discloses the performing of functions of storing a plurality of graphics elements coded in a compressed video signal format; obtaining an original video image coded in a compressed video signal format the same as the compressed video signal format in which the graphics elements are coded; selecting one or more graphics elements; combining the original video image and the selected graphics elements to produce a combined original video and selected graphics elements signal in the compressed video signal format; and decoding the combined original video and selected graphics element signal. (col. 2, lns. 50-67). Applicants submit that Schumann does not disclose, at least, a controller operably coupled to a video scaler and a graphics scaler.

#### **Claims 4-19**

The Office Action states: "Claims 4-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto, U.S. Patent 5,912,710, 6/1999, 348/445." (Office Action, ¶ 2, pg. 2).

#### **Independent Claim 4**

Applicants respectfully submit that Fujimoto does not disclose, teach or suggest Applicants' claimed subject matter, including, inter alia "a single memory coupled to the graphics scaler and to the video scaler, the single memory further comprises a first memory block and a second memory block, wherein the stream of video data is fetched from the first memory block and the stream of graphics data is fetched from the second memory block." (claim 4).

First, Applicants respectfully submit that the Office Action misinterprets the term "memory" as being "storage." Applicants submit that to one of ordinary skill in the art, the term "memory" identifies data storage that comes in the form of memory elements on chips, and the word "storage" is used for memory that exists on tapes or disks. ("memory," [www.webopedia.com/TERM/M/ memory.html](http://www.webopedia.com/TERM/M/memory.html), January 13, 2003). Further, Applicants also submit, that as used in the Application, one of ordinary skill in the art would recognize that "memory" would not include DVD storage media such as Fujimoto's DVD disc (see FIG. 1's DVD Media 100). In addition, Fujimoto itself describes the external DVD information storage device as DVD Media 100, (FIG. 1), while, at the same time, referring to VRAM 103 as video memory 103 (col. 5, ln. 33). Further, Applicants submit that VRAM 103 is the only memory disclosed in Fujimoto that is used to store graphics data, and as such, Fujimoto provides for no such memory for storing video data.

In addition, Applicants further submit that the Office Action misinterprets Fujimoto's figure element 100g as being memory, and fails to identify VRAM 103 as memory for storing

graphics data 100g. In support, Applicants direct the Examiner's attention to Fujimoto's statement that "The *graphics data* 100G are written into the *video memory* 103." (col. 5, lns. 32-33). Further, Applicants also submit that the Office Action also misinterprets Fujimoto's figure element 100b as memory. Applicants direct the Examiner's attention to Fujimoto's statement that "video data 100B [is] stored on a DVD media 100. (col. 5, lns. 5-6)."

As such, Applicants respectfully submit that for at least for such reasons, Fujimoto does not disclose, teach or suggest Applicants' claimed subject matter of claim 1, including, inter alia, "a single memory coupled to the graphics scaler and to the video scaler, the single memory further comprises a first memory block and a second memory block, wherein the stream of video data is fetched from the first memory block and the stream of graphics data is fetched from the second memory block," (claim 4).

#### Dependent Claim 3

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 3 depends from claim 4 (via claim 2), and as a dependent claim therefrom, claim 3 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 3 is also allowable in light of the presence of novel and non-obvious elements contained in claim 3 that are not otherwise present in claim 4.

#### Dependent Claim 5

Applicants acknowledge the Office Action's statement that "Fujimoto fails to disclose the first and second memory blocks included in a frame buffer of a video graphics integrated circuit," (Office Action, ¶ 2, pg. 3). Applicants submit that Fujimoto's disclosed DVD media 100, (e.g., compact disk), for storing both video data 100B and graphics data 100G, is wholly different than Applicants' "single memory, operably coupled to the graphics scaler and to the

video scaler, the single memory further comprises a first memory lock and a second memory block” (see claim 4 arguments above), and more specifically, is wholly different than Applicants’ “single memory .. included in a frame buffer of a video graphics integrated circuit,” (claim 5). As described, Applicants’ single memory here, is a integrated chip based memory, unlike Fujimoto’s storage, DVD media or DVD disc type storage. Nowhere in Fujimoto is there disclosed, taught or suggested the contemplated use of any storage other than such disk-type storage to hold both video data 100B and graphics data 100G. In addition, unlike Fujimoto which shows only the retrieval of information stored on DVD Media 100, Applicants’ describe the allocation of memory for video and graphics data based on the needs of such data (see claim 20). As such, Applicants describe an interactive use of such memory while Fujimoto simply discloses the downloading from its DVD media. Because Fujimoto simply discloses the use of its DVD media 100 as a storage area, and Fujimoto describes the use of such DVD media in conjunction with typical storage area techniques (e.g., the reading of information therefrom), Fujimoto does not disclose, teach or suggest the use of any non-storage area type DVD media 100.

Further, Applicants respectfully submit that the Office Action uses improper hindsight reasoning by suggesting it would have been obvious to modify Fujimoto to achieve Applicants’, inter alia, “the single memory is included in a frame buffer of a video graphics integrated circuit,” (Claim 5), where the Office Action bases such arguments only upon the teaching or suggestion within Applicants’ own disclosure. Applicants submit that there must be some suggestion or motivation, either in the reference itself, or in the knowledge of generally available to one of ordinary skill in the art, to modify the reference as described. Further, to the extent that the Office Action relies on a position that modifications of Fujimoto to meet the claimed invention would have been well within the ordinary skill of the art at the time Applicants’

invention was made, because the references, and/or the knowledge of one skilled in the art, were individually known to those of skilled in the art, is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Applicants submit that if one of ordinary skill in the art at the time of Applicants' invention were to read Fujimoto, including Fujimoto's providing data together on media accessible by the scaling and merging process, such a person would not be in possession of Applicants' claimed subject matter.

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 5 depends from claim 4, and as a dependent claim therefrom, claim 5 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 5 is also allowable in light of the presence of novel and non-obvious elements contained in claim 5 that are not otherwise present in claim 4.

#### Dependent Claim 6

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 6 depends from claim 4, and as a dependent claim therefrom, claim 6 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 6 is also allowable in light of the presence of novel and non-obvious elements contained in claim 6 that are not otherwise present in claim 4.

#### Dependent Claim 7

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 7 depends from claim 4, and as a dependent claim therefrom, claim 7 is allowable for at least the reasons claim 4 is allowable. Applicants

further submit, argued in part at least immediate above, that claim 7 is also allowable in light of the presence of novel and non-obvious elements contained in claim 7 that are not otherwise present in claim 4.

#### Dependent Claim 8

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 8 depends from claim 4, and as a dependent claim therefrom, claim 8 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 8 is also allowable in light of the presence of novel and non-obvious elements contained in claim 8 that are not otherwise present in claim 4.

#### Dependent Claim 9

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 9 depends from claim 4, and as a dependent claim therefrom, claim 9 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 9 is also allowable in light of the presence of novel and non-obvious elements contained in claim 9 that are not otherwise present in claim 4.

#### Dependent Claim 10

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 10 depends from claim 4, and as a dependent claim therefrom, claim 10 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 10 is also allowable in light of the presence of novel and non-obvious elements contained in claim 10 that are not otherwise present in claim 4.

#### Dependent Claim 11

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 11 depends from claim 4, and as a dependent claim therefrom, claim 11 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 11 is also allowable in light of the presence of novel and non-obvious elements contained in claim 11 that are not otherwise present in claim 4.

#### Dependent Claim 12

Applicants respectfully submit that the Office Action uses improper hindsight reasoning by suggesting it would have been obvious to modify Fujimoto to achieve Applicants', inter alia, "a graphics flicker removal block operably coupled to the graphics scaler, where the graphics flicker removal block removes flicker from the scaled graphics stream," (Claim 5), where the Office Action, using impermissible hindsight, bases such arguments only upon the teaching or suggestion within Applicants' own disclosure. Applicants submit that there must be some suggestion or motivation, either in the reference itself, or in the knowledge of generally available to one of ordinary skill in the art, to modify the reference as described. Further, to the extent that the Office Action relies on a position that modifications of Fujimoto to meet the claimed invention would have been well within the ordinary skill of the art at the time Applicants' invention was made, because the references, and/or the knowledge of one skilled in the art, were individually known to those of skilled in the art, is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Applicants submit that if one of ordinary skill in the art at the time of Applicants' invention were to read Fujimoto, including that disclosed in Fujimoto's FIG. 16 "203"; col. 14, ll. 56 et seq; col.

16, ll. 56 et seq.; col. 16 ll. 19 et seq.; and FIG. 11, such a person would not be in possession of Applicants' claimed subject matter.

In further support the Applicants submit that the item identified as "203" in FIG. 16 is labeled an audio controller. Applicants submit that an audio controller is not capable of removing flicker from the scaled graphics stream. However, graphics/video mixer is shown to contain current and next scaling/H filters 305 and 306 respectively. The scaling H filters are described as executing a horizontal filtering operation for reducing the brightness and the color signal bandwidth of the data in a target line and for performing the horizontal scaling operations. (col. 15, lns. 31-41). The scaling H filters are not described as performing any flicker removal from a scaled graphics stream, nor is the greater graphics/video mixer shown or described as doing the same. Applicants submit that the filtering in Fujimoto performed in the graphics/video mixer is limited to the displaying of mixed titles of graphics and motion pictures with filtering directed to Y, Cr and Cb data, but does not address removing flicker from the scaled graphics stream. (col. 16, lns. 19-67).

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 12 depends from claim 4, and as a dependent claim therefrom, claim 12 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 12 is also allowable in light of the presence of novel and non-obvious elements contained in claim 12 that are not otherwise present in claim 4.

#### Dependent Claim 13

Applicants respectfully reassert the arguments made above regarding claim 4 and 12. In addition, Applicants also submit that because claim 13 depends from claim 4, and as a dependent claim therefrom, claim 13 is allowable for at least the reasons claim 4 is allowable. Applicants



further submit, argued in part at least immediate above, that claim 13 is also allowable in light of the presence of novel and non-obvious elements contained in claim 13 that are not otherwise present in claim 4.

#### Dependent Claim 14

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 14 depends from claim 4, and as a dependent claim therefrom, claim 14 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 14 is also allowable in light of the presence of novel and non-obvious elements contained in claim 14 that are not otherwise present in claim 4.

#### Dependent Claim 15

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 15 depends from claim 4, and as a dependent claim therefrom, claim 15 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 15 is also allowable in light of the presence of novel and non-obvious elements contained in claim 15 that are not otherwise present in claim 4.

#### Dependent Claim 16

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 16 depends from claim 4, and as a dependent claim therefrom, claim 16 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 16 is also allowable in light of the presence of novel and non-obvious elements contained in claim 16 that are not otherwise present in claim 4.

#### Dependent Claim 17

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 17 depends from claim 4, and as a dependent claim therefrom, claim 17 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 17 is also allowable in light of the presence of novel and non-obvious elements contained in claim 17 that are not otherwise present in claim 4.

#### Dependent Claim 18

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 18 depends from claim 4, and as a dependent claim therefrom, claim 18 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 18 is also allowable in light of the presence of novel and non-obvious elements contained in claim 18 that are not otherwise present in claim 4.

#### Dependent Claim 19

Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 19 depends from claim 4, and as a dependent claim therefrom, claim 19 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 19 is also allowable in light of the presence of novel and non-obvious elements contained in claim 19 that are not otherwise present in claim 4.

**Claims 2, 20-29, 30 and 38**

The Office Action states: “Claims 2, 20-29[, 30] and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto, U.S. Patent 5,912,710, 6/1999, 348/445 and further in view of Robert Schumann et al., U.S. Patent 6,078, 328, 6/2000.” (Office Action, ¶ 2, pg. 6).

**Dependent Claim 2**

Applicants submit that Fujimoto does not disclose, teach or suggest, whether considered alone or in combination with Schumann, at least, the “allocat[ing] of size of the first ... and ... second memory blocks.” First, and in contrast to the Office Action’s statement, (Office Action, ¶ 2, pg. 6), Applicants specifically submit that Fujimoto does not disclose, teach or suggest such functionality on its own. To support its view, Applicants direct the Examiner’s attention to the arguments above regarding claim 5. Fujimoto’s single use of the DVD media 100 as a storage area device provides no disclosure, teaching or suggestion of any need for, or any capability of allocating size of a first and second memory block. The Fujimoto system simply reads from the video data space and the graphics data space as provided on the DVD media 100, and in no way allocates any such space.

Further, neither Fujimoto nor Schumann, disclose, teach or suggest, whether considered alone or in combination, at least, “a controller operably coupled to the video scaler and the graphics scaler, wherein the controller provides control information to the video scaler and the graphics scaler.” In contrast, Fujimoto discloses the separation of the graphics data and the video data after leaving DVD drive 101 (FIG. 1) and each signal being processes separately before reaching the  $\alpha$ -blending 108. More specifically, the scaler 107, associated with the separate video data processing, is not connected to a controller, (FIG. 1), nor is the scaler 106, associated with the separate graphics data processing, connected to a controller, and as such, both scalers 106 and 107 are not connected to a controller. Further, Applicants’ respectfully

submit that Schumann also does not show a controller operably coupled to a video scaler and a graphics scaler.

Further, Applicants submit that the Office Action's suggested reason to combine what is allegedly contained in the references to achieve Applicants' claimed subject matter is not supported by the cited art or that known to one of ordinary skill in the art. More specifically, because Fujimoto discloses the reading of information on a DVD media storage device, and does not disclose the manipulation of the data on such a storage device, not does Fujimoto disclose, teach or suggest any advantage of so doing, Fujimoto alone, or Fujimoto when considered in combination with Schumann, does not disclose, teach or suggest Applicants' claimed subject matter.

In addition, Applicants respectfully reassert the arguments made above regarding claim 4. In addition, Applicants also submit that because claim 2 depends from claim 4, and as a dependent claim therefrom, claim 2 is allowable for at least the reasons claim 4 is allowable. Applicants further submit, argued in part at least immediate above, that claim 2 is also allowable in light of the presence of novel and non-obvious elements contained in claim 2 that are not otherwise present in claim 4.

#### Independent Claim 20

Applicants respectfully reassert the arguments made above regarding claim 1. In addition, Applicants respectfully reassert the arguments made above regarding claims 2 and concerning allocating memory, including the difference between storage-type area disclosed in Fujimoto and the Applicants' claimed "first ... and second block of memory."

Further, Applicants submit that the Office Action's suggested reason to combine what is allegedly contained in the references to achieve Applicants' claimed subject matter is not supported by the cited art or that known to one of ordinary skill in the art. More specifically,

because Fujimoto discloses the reading of information on a DVD media storage device, and does not disclose the manipulation of the data on such a storage device, nor does Fujimoto disclose, teach or suggest any advantage of so doing, Fujimoto alone, or Fujimoto when considered in combination with Schumann, does not disclose, teach or suggest Applicants' claimed subject matter.

#### Dependent Claim 22

Applicants respectfully reassert the arguments made above regarding claim 20. In addition, Applicants also submit that because claim 22 depends from claim 20, and as a dependent claim therefrom, claim 22 is allowable for at least the reasons claim 20 is allowable. Applicants further submit, argued in part at least immediate above, that claim 22 is also allowable in light of the presence of novel and non-obvious elements contained in claim 22 that are not otherwise present in claim 20.

#### Dependent Claim 23

Applicants respectfully reassert the arguments made above regarding claim 20. In addition, Applicants also submit that because claim 23 depends from claim 20, and as a dependent claim therefrom, claim 23 is allowable for at least the reasons claim 20 is allowable. Applicants further submit, argued in part at least immediate above, that claim 23 is also allowable in light of the presence of novel and non-obvious elements contained in claim 23 that are not otherwise present in claim 20.

#### Dependent Claim 24

Applicants respectfully reassert the arguments made above regarding claims 12 and 20. Further, Schumann discusses the general display of a background image from an I-frame, an overlaid base image from an P-frame for each graphics element and the code to present frame

creation ,slice creation and macro block manipulation, (col. 8-10), however, Schumann does not disclose, teach or suggest the removal of graphics flicker

In addition, Applicants also submit that because claim 24 depends from claim 20, and as a dependent claim therefrom, claim 24 is allowable for at least the reasons claim 20 is allowable. Applicants further submit, argued in part at least immediate above, that claim 24 is also allowable in light of the presence of novel and non-obvious elements contained in claim 24 that are not otherwise present in claim 20.

#### Dependent Claim 25

Applicants respectfully reassert the arguments made above regarding claims 12, 20 and 24. In addition, Applicants also submit that because claim 25 depends from claim 20, and as a dependent claim therefrom, claim 25 is allowable for at least the reasons claim 20 is allowable. Applicants further submit, argued in part at least immediate above, that claim 25 is also allowable in light of the presence of novel and non-obvious elements contained in claim 25 that are not otherwise present in claim 20.

#### Dependent Claim 26

Applicants respectfully reassert the arguments made above regarding claim 20. In addition, Applicants also submit that because claim 26 depends from claim 20, and as a dependent claim therefrom, claim 26 is allowable for at least the reasons claim 20 is allowable. Applicants further submit, argued in part at least immediate above, that claim 26 is also allowable in light of the presence of novel and non-obvious elements contained in claim 26 that are not otherwise present in claim 20.

#### Dependent Claim 27

Applicants respectfully reassert the arguments made above regarding claim 20. In addition, Applicants also submit that because claim 27 depends from claim 20, and as a

dependent claim therefrom, claim 27 is allowable for at least the reasons claim 20 is allowable. Applicants further submit, argued in part at least immediate above, that claim 27 is also allowable in light of the presence of novel and non-obvious elements contained in claim 27 that are not otherwise present in claim 20.

#### Dependent Claim 28

Applicants respectfully reassert the arguments made above regarding claim 20. In addition, Applicants also submit that because claim 28 depends from claim 20, and as a dependent claim therefrom, claim 28 is allowable for at least the reasons claim 20 is allowable. Applicants further submit, argued in part at least immediate above, that claim 28 is also allowable in light of the presence of novel and non-obvious elements contained in claim 28 that are not otherwise present in claim 20.

#### Dependent Claim 29

Applicants respectfully reassert the arguments made above regarding claim 20. In addition, Applicants also submit that because claim 29 depends from claim 20, and as a dependent claim therefrom, claim 29 is allowable for at least the reasons claim 20 is allowable. Applicants further submit, argued in part at least immediate above, that claim 29 is also allowable in light of the presence of novel and non-obvious elements contained in claim 29 that are not otherwise present in claim 20.

#### Independent Claim 30

Applicants respectfully reassert the arguments made above regarding claims 4, 5 and 20. Specifically, Applicants direct the Examiner's attention to the arguments concerning "memory vs. storage," "single memory" and "disk storage vs. frame buffer storage." As such, Applicants submit that neither Fujimoto, nor Schumann et al., disclose, teach or suggest, either implicitly or explicitly, whether considered alone, or individually, Applicants' claimed subject matter.

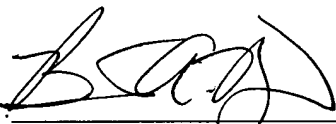
Independent Claim 38

Applicants respectfully reassert the arguments made above regarding claim 2, 4 and 20. In particular, Applicants direct the Examiner's attention to the arguments regarding "memory vs. storage," "single memory" and "allocation and the DVD disk storage." As such, Applicants submit that neither Fujimoto, nor Schumann et al., disclose, teach or suggest, either implicitly or explicitly, whether considered alone, or individually, Applicants' claimed subject matter.

**CONCLUSION**

For the foregoing reasons, withdrawal of the rejections and allowance of the claims is respectfully requested. If there are any questions or comments regarding this response, the Examiner is encouraged to contact the undersigned at 312-609-7500.

Respectfully submitted,

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